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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,218	12/01/2003	Kevin T. O'Dougherty	N95.12-0014	2116

7590 12/29/2005
William F. Ryann
Advanced Technology Materials, Inc.
7 Commerce Drive
Danbury, CT 06810

EXAMINER

PAIK, STEVE S

ART UNIT	PAPER NUMBER
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2876

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/725,218

Applicant(s)

O'DOUGHERTY ET AL.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-37 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed October 11, 2005. The applicant amended claims 12 and 32.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Mathews et al. (US 6,751,520B2).

Re claim 1, Mathews et al. disclose a system including a hazard zone (28) and a non-hazard zone (safe zone 30), the system comprising:

storage means (paint gun inherently includes a storage means for storing paint to be sprayed), located in the hazard zone (The paint gun is a part of a robot 12. The hazardous zone 28 may contain all or a portion of robot as well as other system components. The portion of robot that is not contained in the hazardous zone must be located in the safe zone in accordance with the figure 1.), for electrically storing information (mainly pressure information);

Art Unit: 2876

communication means (communication network 46; col. 3, line 63- col. 4, line 15), located in the hazard zone, for storing information to and reading information from the storage means;

controller means (main controller 42), located in the non-hazard zone and in electrical communication with the communication means (Fig. 2), for controlling the system based on information (pressure information) read from the storage means by the communication means; and

an intrinsic safety barrier (a pressure control valve for significantly reducing the opportunity for creating sparks and other igniting phenomenon) located in the non-hazard zone (col. 2, ll. 7-10) and connected between the communication means and the controller means to limit electrical energy passing to the communication means (col. 1, ll. 21-30).

Allowable Subject Matter

4. Claims 12-37 are allowable.
5. Claims 2-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of the record discloses, teaches, or fairly suggests a manufacturing system comprising, among other things, an intrinsic safety barrier including a plurality of forward conduction diodes connected in parallel between a controller means and the ground in which the plurality of forward conduction diodes are arranged in a multiple redundancy configuration and a

Art Unit: 2876

fuse connected in series the plurality of forward conduction diodes to prevent overloading the diodes and to limit electrical energy passing into a hazardous zone.

Response to Arguments


6. Applicant's arguments, see 9-13, filed October 11, 2005, with respect to the rejection(s) of claim(s) 1-37 under 35 U.S.C. § 102/103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mathews et al. (US 6,751,520 B2).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404. The examiner can normally be reached on Monday - Friday 5:30a-2:00p (Maxi-Flex*).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Steven S. Paik
Primary Examiner
Art Unit 2876

ssp